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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
09/246,220	07/17/01	F. L. PANKRUY	M 450-200115

MM9170C10  
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EXAMINER

ART UNIT	PAPER NUMBER
2815	

DATE MAILED:

06/20/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/346,283	FLANNERY, MICHAEL R.	
Examiner	Art Unit		
José R. Diaz	2815		

**The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**-- The MA  
Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.

- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.

- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.

- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).

- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

1)  Responsive to communication(s) filed on 05 April 2001 .

2a)  This action is **FINAL**.                    2b)  This action is non-final.

3)  Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

4)  Claim(s) 1-7 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

5)  Claim(s) \_\_\_\_\_ is/are allowed.

6)  Claim(s) 1-7 is/are rejected.

7)  Claim(s) \_\_\_\_\_ is/are objected to.

8)  Claims \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

9)  The specification is objected to by the Examiner.

10)  The drawing(s) filed on 01 July 1999 is/are objected to by the Examiner.

11)  The proposed drawing correction filed on \_\_\_\_\_ is: a)  approved b)  disapproved.

12)  The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

13)  Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a)  All b)  Some \* c)  None of:  
1.  Certified copies of the priority documents have been received.  
2.  Certified copies of the priority documents have been received in Application No. \_\_\_\_.  
3.  Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.  
14)  Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

**Attachment(s)**

15)  Notice of References Cited (PTO-892)  
16)  Notice of Draftsperson's Patent Drawing Review (PTO-948)  
17)  Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_.

18)  Interview Summary (PTO-413) Paper No(s). \_\_\_\_.  
19)  Notice of Informal Patent Application (PTO-152)  
20)  Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Drawings***

➤ The drawings are objected to under 37 CFR 1.83(a) because they fail to show the cross sectional view of Figure 1 illustrating the sensor, the visual display, the pixel(s) and the logic circuit over the substrate, as described in the specification. Any structural detail that is essential for a proper understanding of the disclosed invention should be shown in the drawing. MPEP § 608.02(d). Correction is required.

### ***Specification***

➤ The abstract of the disclosure is objected to because it should be limited to a single paragraph. Correction is required. See MPEP § 608.01(b).

Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The

disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

➤ The disclosure is objected to because of the following informalities: the description of the prior art disclosed in US Patent No. 5,363,952, stated in Page 2, lines 22-24 of the Specification, appears to be inconsistent with said US Patent Document.

Appropriate correction is required.

#### ***Claim Objections***

➤ Claim1 objected to because of the following informalities:

- Claim 1, line 3: the term "a logic circuit", after "...sensor element electrically connected to...", should be changed to --the logic circuit--

Appropriate correction is required.

#### ***Claim Rejections - 35 USC § 112***

➤ The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

➤ Claims 4-6 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claims 4-6 are indefinite because it is not clear whether the dimensions of the pixels are taken in term of diameter of a pixel or distance between pixels.

***Claim Rejections - 35 USC § 102***

➤ The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

➤ Claim 1-3 and 7 are rejected under 35 U.S.C. 102(b) as being anticipated by Burgess et al. (US Patent No. 3,757,511).

Regarding claims 1 and 7, Burgess et al. disclose an integrated circuit (Figures 1-9) with a micromechanical element (34) comprising a support substrate (21) supporting a sensor element (34), a logic circuit (25), and a semiconductor visual display element (23), the sensor element electrically connected to a logic circuit, and the logic circuit being electrically connected to the semiconductor visual display element (See Figure 1).

Regarding claims 2 and 3, Burgess et al. teach that semiconductor visual display element (23) comprises a GaAs light-emitting pn junctions (see col. 7, lines 31-40).

***Claim Rejections - 35 USC § 103***

➤ The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

- Claims 4-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Burgess et al. (US Patent No. 3,757,511) in view of Ogihara et al. (US Patent No. 6,222,208 B1).

Regarding claims 4-6, Burgess et al. fail to teach an array of pixels having dimensions of less than 20 micrometers. Ogihara et al. teach that it is well known in the art to form pixels having a pitch of about 20  $\mu\text{m}$  (see col. 5, lines 12-15). Therefore, it would have been obvious to one having ordinary skill in the art at the same time the invention was made to modify Burgess et al. to include the step of forming pixels having a pitch of about 20  $\mu\text{m}$ . The ordinary artisan would have been motivated to modify Burgess et al. in the manner described above for at least the purpose of providing a high precision and bright display.

#### ***Response to Arguments***

- Applicant's arguments with respect to claims 1-7 have been considered but are moot in view of the new ground(s) of rejection.

#### ***Correspondence***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to José R. Díaz whose telephone number is (703) 308-6078. The examiner can normally be reached on 8:00 - 5:00 Monday through Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eddie C. Lee can be reached on (703) 308-1690. The fax phone numbers

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for the organization where this application or proceeding is assigned are (703) 308-7722 for regular communications and (703) 308-7722 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

JRD  
June 18, 2001



EDDIE LEE  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2800